

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/02

Date Received: 02/14/02

Project: Hydro Tank Test, PO#M87498

Date Extracted: 02/21/02

Date Analyzed: 02/21/02

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR TOTAL METALS BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M87498 202090-01	<0.05	1.1	27	3.7
Method Blank	<0.05	<0.05	<0.05	<0.05

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QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 202039-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.16	0.18	12	0-20
Copper	mg/L (ppm)	0.34	0.32	6	0-20
Nickel	mg/L (ppm)	0.12	0.17	34 a	0-20
Zinc	mg/L (ppm)	0.07	<0.05	nm	0-20

Laboratory Code: 202039-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	0.16	94	98	80-120	4
Copper	mg/L (ppm)	2	0.34	92	92	80-120	0
Nickel	mg/L (ppm)	4	0.12	93	94	80-120	1
Zinc	mg/L (ppm)	2	0.07	95	98	80-120	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	108	107	80-120	1
Copper	mg/L (ppm)	2	104	104	80-120	0
Nickel	mg/L (ppm)	4	106	105	80-120	1
Zinc	mg/L (ppm)	2	107	107	80-120	0

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
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February 28, 2002

DUPLICATE COPY

INVOICE #02ACU0228-3

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project Hydro Tank Test, PO#M87498 - Results of testing requested by Gerry Thompson for material submitted on February 14, 2002.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc by Method 6010B @ \$80 per sample	\$ 80.00
Amount Due	\$ 80.00

FEDERAL TAX ID # (b) (6)

202090

SAMPLE CHAIN OF CUSTODY

ME 2/14/02 BI₂

Send Report To

Company

Address

City, State, ZIP

Phone #

Fax #

SAMPLERS (signature)

PROJECT NAME/NO.

PO #

REMARKS

Page # of

TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions


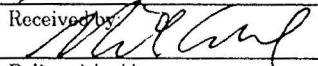
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HPS	CH ₄ , n ₂				
m87498	01	2/14/02	11:00	H ₂ O	1											

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Gerald Thompson	ACW	2/14/02	11:00am
Received by: 	Michael Edell	P:B inc	2/14/02	12:00am
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

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February 28, 2002

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

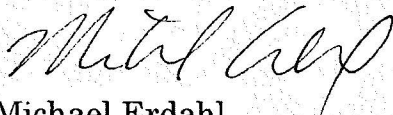
Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 14, 2002 from your Hydro Tank Test, PO#M87498 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
ACU0228R.DOC